

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

3G LICENSING, S.A.,
KONINKLIJKE KPN N.V., and
ORANGE S.A.,

Plaintiffs,

V.

HTC CORPORATION,

Defendant.

Case No. 17-cv-83-LPS-CJB

JURY TRIAL DEMANDED

THIRD AMENDED COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement in which Plaintiffs 3G Licensing, S.A. (hereafter “3G Licensing”), Koninklijke KPN N.V. (hereafter “KPN”) and Orange S.A. (hereafter “Orange”) (collectively “Plaintiffs”) make the following allegations against HTC Corporation:

BACKGROUND

1. 3G Licensing holds more than 400 patents and patent applications fundamental to a variety of core technologies involving consumer electronics and wireless telecommunication implementations. 3G Licensing's patents have been licensed by many of the world's leading mobile technology companies, including HTC Corporation's competitors.

2. KPN's extensive research and development efforts likewise have led to hundreds of issued patents in the United States and across the world. These patents have been licensed in turn by leading global telecommunications companies, including many of HTC Corporation's mobile technology competitors.

3. Plaintiffs have made their patents available for license on an individual basis through bilateral negotiations and, at the licensor's option, collectively through joint licensing or patent pool licensing arrangements.

4. Prior to filing this Complaint, Plaintiffs provided HTC Corporation with notice of the patents at issue and engaged in lengthy negotiations with HTC Corporation to try to resolve this dispute.

5. Despite these efforts, HTC Corporation refused to license on mutually agreeable terms the patents described herein. Plaintiffs therefore file this suit against HTC Corporation seeking the Court's protection of their valuable intellectual property rights.

PARTIES

6. Plaintiff 3G Licensing, S.A., is an intellectual property licensing corporation that has its headquarters at 6, Avenue Marie-Thérèse, L-2132 Luxembourg.

7. Plaintiff Koninklijke KPN N.V. is a telecommunications (including fixed, mobile, television and internet) and ICT solution provider headquartered at Maanplein 55, NL-2516 CK, The Hague, The Netherlands.

8. Plaintiff Orange S.A. (formerly France Télécom S.A.) is a multi-national telecommunications solution provider incorporated under the laws of France that has its headquarters at 78, rue Olivier de Serres, 75015 Paris, France. Orange joins this action as a nominal plaintiff only and only as to those patents identified herein as having been assigned to 3G Licensing.

9. On information and belief, Defendant HTC Corporation is a Taiwanese corporation with its principal place of business at 23 Xinghau Road, Taoyuan City, Taoyuan 330,

Taiwan, R.O.C. HTC Corporation can be served with process pursuant to the Delaware Long Arm Statute, 10 Del. C. § 3104.

JURISDICTION AND VENUE

10. This action arises under the patent laws of the United States, Title 35 of the United States Code.

11. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

12. This Court has personal jurisdiction over HTC Corporation because, directly or through intermediaries, including its wholly-owned subsidiaries HTC America Holding Inc. and HTC America Inc., it has committed acts within Delaware giving rise to this action and/or has established minimum contacts with Delaware such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice.

13. For example, HTC Corporation has placed and is continuing to place infringing products into the stream of commerce via an established distribution channel that includes HTC America Inc. with the knowledge and/or understanding that such products are being and will continue to be sold in the State of Delaware, including in this District.

14. On information and belief, HTC Corporation also operates directly in the United States through its wholly-owned subsidiary Kyocera International, Inc., which it controls and which acts as its agent in the United States. For example, in its 2011 and 2013-2015 Annual Reports, HTC Corporation stated that it “maintains a presence in all key markets, including the United States.” Further, HTC Corporation stated in its 2014 and 2015 Annual Reports that its “products are distributed across ... America[] ... through major carriers and local retail channels.” HTC Corporation further has admitted that it “promotes [its telecommunications] products

directly to mass-market consumers via long-term, unique relationships with the world's largest telecommunications service providers that include the four big mobile operators in the United States,” and that it has released at least the accused HTC DROID DNA smartphone product in the United States in partnership with “US carrier Verizon.”

15. On information and belief, HTC Corporation has derived substantial revenues from its infringing acts in the State of Delaware and this District, including from its sales of infringing devices.

16. In addition, on information and belief, HTC Corporation has, and continues to, knowingly induce infringement by others within the United States and this District by advertising, marketing, and directing products containing infringing functionality to consumers, customers, manufacturers, distributors, resellers, partners, and/or end users in the United States and by providing instructions, user manuals, advertising, and/or marketing materials which facilitate, direct, or encourage the use of infringing functionality with knowledge thereof.

17. Further, HTC Corporation has represented in various annual reports, including its 2014 and 2015 Annual Reports, that it is the “controlling company” and “primary R&D and manufacturing base and provider of technical resources” for various affiliates, including HTC America, Inc., which it directs and uses to distribute in the United States various products it manufactures, including the products accused of infringement in this action. HTC Corporation also has represented in this action that “HTC Corp. has a regular and established place of business in the United States—[that of] its wholly owned subsidiary, HTC America.” Further, HTC Corporation maintains a website through which it has offered for sale and continues to offer for sale to United States consumers various accused products, including the HTC U11.

18. Venue is proper at least as to HTC Corporation under 28 U.S.C. § 1391(b) and (c) and 28 U.S.C. § 1400.

THE ASSERTED PATENTS

19. This lawsuit asserts causes of action for infringement of United States Patent Nos. 6,212,662 (“’662 patent”); 9,014,667 (“’667 patent”); 7,933,564 (“’564 patent”); 7,995,091 (“’091 patent”); and 6,856,818 (“’818 patent”) (collectively, the “Asserted Patents”).

20. The ’662 and ’667 patents previously were the subject of litigation captioned *Koninklijke KPN N.V., v. Samsung Electronics Co., Ltd.*, Civil Action Nos. 2:14-cv-1165 and 2:15-cv-948 (E.D. Tex.). On September 21, 2016, the parties filed a “Joint Stipulation to Dismiss” that lawsuit.

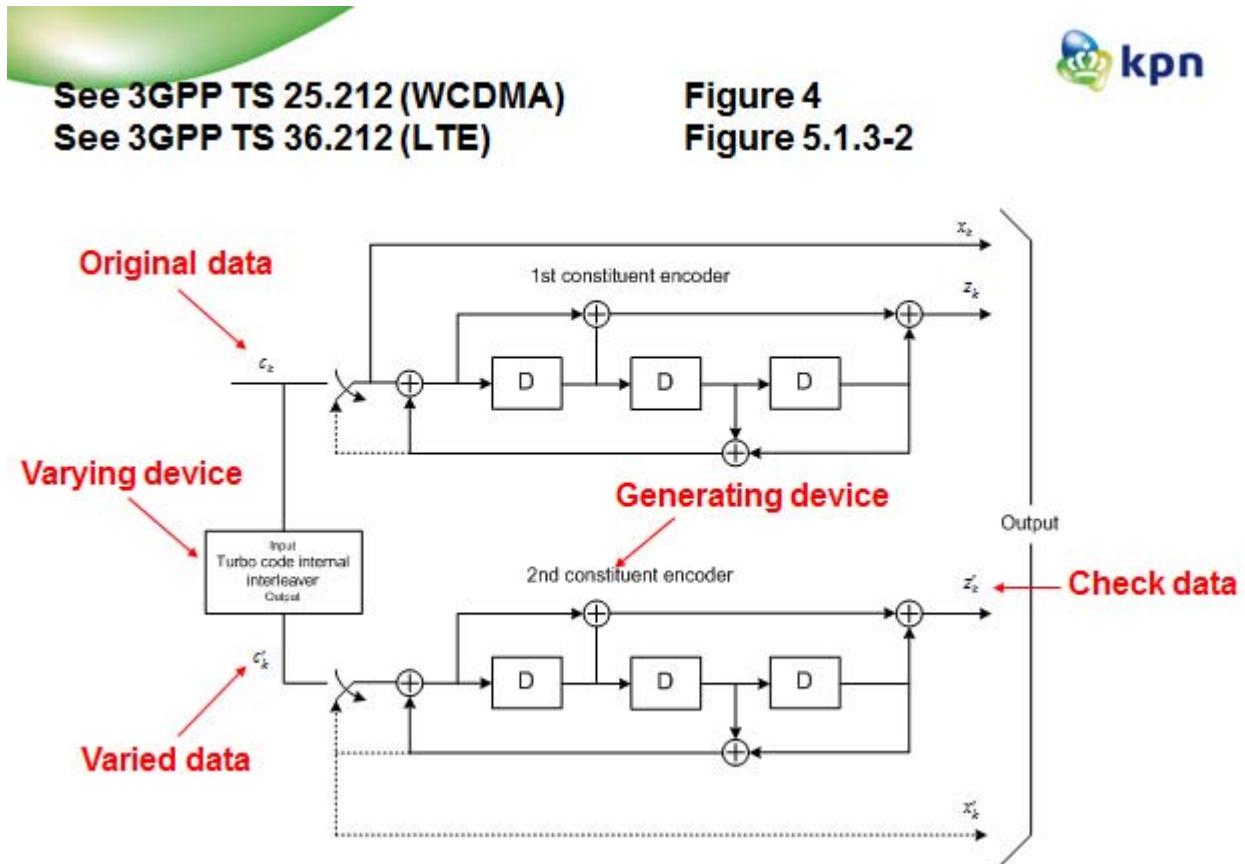
21. On July 8, 2016, the United States Patent and Trademark Office, Patent Trial and Appeal Board (“PTAB”) largely declined to institute *inter partes* review of the ’662 patent—finding “no reasonable likelihood” that any of the invalidity contentions directed at claims 3 and 4 of the ’662 patent had merit.

22. Defendant has been on notice of the asserted patents, has been invited to take a license to the asserted patents, and has declined to license the asserted patents on commercially reasonable terms.

23. For example, HTC Corporation received notice of the ’662 patent and its infringement of it at least by November 4, 2011, when Koenraad Wuyts, KPN’s Chief Intellectual Property Officer, sent Lynn Yu, a director of licensing for HTC Corporation, an email identifying the ’662 patent and telling Ms. Yu that KPN “wish[ed] to explore the possibility for HTC to take an extension under the [then] current HTC-KPN license agreement” in order to license this and other patents. Subsequently, on November 22, 2011, Mr. Wuyts

provided Ms. Yu with a claim chart for the '662 patent and informed Ms. Yu that the '662 patent had been recognized as essential to the 3GPP TS 36.212 standard governing Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and Channel Coding, Version 9.3.0 (2010-09), for Long-Term Evolution radio platform devices ("LTE," also commonly referred to as "4G" and/or "4G LTE" and/or "LTE-Advanced").

24. Further, on December 9, 2011, KPN met with HTC Corporation at its Taiwan headquarters to discuss the '662 patent. During that meeting, KPN gave a presentation on the '662 patent, during which it told HTC Corporation that the '662 patent had been recognized as essential both to the 3GPP TS 36.212 standard governing LTE devices and the 3GPP TS 25.212 standard governing UMTS devices (also commonly referred to as "3G" and/or "W-CDMA" devices). In that presentation, KPN also explained to HTC how its LTE and UMTS devices infringed, including by providing the following depiction of the infringing aspects of HTC Corporation's LTE and UMTS devices:



25. Further, on December 22, 2011, Mr. Wuyts suggested to Ms. Yu that the parties meet again on February 17, 2012, to discuss HTC Corporation obtaining a license. In the same email, Mr. Wuyts also told Ms. Yu to “please send us any question you may have on the patents, claim charts or licensing proposal prior to the meeting.”

26. On April 16, 2012, KPN met with Ms. Yu again to discuss HTC Corporation licensing the '662 patent. During that meeting, KPN reiterated that HTC Corporation's “Handsets and Tablets” infringed the '662 patent and required a license.

27. Prior to filing suit, KPN again reiterated to HTC Corporation that its “UMTS, CDMA2000, and LTE handsets make use of the ['662] patent” and required a license.

28. On behalf of KPN, HTC Corporation also was provided additional notice of the '662 patent and its infringement by Sisvel UK Limited (“Sisvel”), the parent company of 3G

Licensing. For example, at least by July 16, 2015, Sisvel sent HTC Corporation a letter in which it identified the '662 patent and told HTC Corporation that its "LTE capable products, including but not limited to, the mobile phone (e.g. model HTC One MS, M9), Tablet (e.g. model HTC Nexus 9), etc[.], require a license." Sisvel also told HTC Corporation that "[c]ontinuing to manufacture, import and/or sell such products without a license to the LTE patents will leave HTC with a growing liability." HTC Corporation confirmed receipt of this correspondence on July 29, 2015.

29. HTC Corporation also received pre-suit notice of the '667 patent and its infringement of it. At least by November 4, 2011, KPN provided notice to Ms. Yu of the European counterpart to the '667 patent, EP2250835, and provided documentation to Ms. Yu at least by December 10, 2011, detailing how HTC Corporation's "LTE network equipment" and "LTE terminal" products infringed EP2250835. Further, no later than December 22, 2011, KPN informed Ms. Yu that KPN had applied for a United States patent for the invention claimed in the '667 patent.

30. Further, on April 26, 2016, KPN again provided Ms. Yu with LTE and UMTS claim charts for the European counterpart to the '667 patent, which KPN told HTC Corporation also demonstrated how its products infringed the '667 patent. KPN also identified various standards to which the '667 patent had been recognized as essential, including 3GPP TS 22.368, 3GPP TS 23.003, 3GPP TS 23.060, and 3GPP TS 24.008, and reiterated to HTC Corporation that it needed to obtain a license to the '667 patent for its LTE and UMTS devices.

31. Further, HTC Corporation received notice of its infringement of the '667 patent through the filing of the original Complaint in this action on January 30, 2017.

32. HTC Corporation also received notice of the '818 and '091 patents and its infringement of each at least upon its receipt of a letter from Sisvel dated May 20, 2015, telling HTC that a license to each was needed for "HTC's LTE capable products, including but not limited to, the mobile phone (e.g. model HTC One MS, M9), Tablet (e.g. model HTC Nexus 9), etc." Sisvel sent a similar letter dated June 1, 2015, and followed up with another letter dated July 16, 2015, in which it told HTC that "the LTE enabled products that are manufactured or sold by your company, remain unlicensed" and that "[c]ontinuing to manufacture, import and/or sell such products without a license to the LTE patents will leave HTC with a growing liability." HTC Corporation confirmed receipt of this correspondence in a conversation with Sisvel that took place on July 29, 2015.

33. Further, Sisvel continued to negotiate with HTC Corporation regarding obtaining a license to these patents.

34. Further, at least by January 25, 2016, Sisvel's public web site stated that claim 18 of the '818 patent had been recognized as essential to various standards, including 3GPP TS 21.111 V7.1.0, Sections 1, 4, 5.1, 5.2, 6.1 and 11.2; 3GPP TS 31.102 V7.13.0, Sections 4.4.2, 4.7, 5.1.1.1, and 5.3.29; 3GPP TS 31.101 V7.0.1, Section 8.1; ETSI TS 102.221 V7.4.0, Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2, Figure 8.2, 8.4, and K.1, and Table 8.1 and 11.11, which govern the use of selective access to data stored on subscriber identity modules. Further, at least by January 25, 2016, Sisvel's public web site stated that the '091 patent had been recognized as essential to various standards, including 3GPP TS 24.173 V9.1.0, Sections 4.2 and 5.2; 3GPP TS 22.279 V7.1.0, Sections 1, 2, 3.1, 6, and 8; 3GPP TS 23.279 V7.7.0, Sections 8.1, Fig 8.1, 8.3.1, Fig 8.3.1, 8.3.2, and Fig 8.3.2.; 3GPP TS 23.228 V7.16.0, Sections 4.13.2 and 4.13.3; 3GPP TS 24.229 V7.28.0, Sections 5.1, 5.1.2A.1, 6.1.2,

6.1.3, 7.9.2, 7.2A.8.1, 7.2A.8.2, 7.2A.9.1, 7.2A.9.2, and 7.9.3; 3GPP TS 24.279 V7.7.0, Sections 6.3.1.8, 6.3.1.9, 7.3.1.3, 7.3.1.4, A.1, A.2, A.3, 7.3.1.8, and 7.3.1.9; and GSMA IR.84, Sections 2.6.1.1 and Table 2, which govern the making and discontinuing of mixed media telecommunications calls, including video calls. As such, Sisvel reiterated to Ms. Yu that HTC Corporation needed to obtain a license for its “LTE enabled products (e.g. HTC Desire 530).”

35. Further, at least by August 31, 2016, Sisvel’s public web site stated that the ’564 patent had been recognized as essential to various standards, including 3GPP TS 36.211 v8.7.0, Sections 6.3, 6.3.2, 6.3.3, 6.3.3.3, 6.3.4, 6.3.4.3, Figure 6.3.1, and Table 6.3.3.3.1, which govern the use of multiple antennas to transmit or receive data, and that HTC’s LTE products thus required a license to this patent as well.

36. Further, HTC Corporation received notice of its infringement of the ’818, ’091, and ’564 patents upon Plaintiffs’ filing of the original Complaint in this action on January 30, 2017.

COUNT 1
INFRINGEMENT OF U.S. PATENT NO. 6,212,662

37. Plaintiffs repeat and incorporate by reference each preceding paragraph as if fully set forth herein and further state:

38. On April 3, 2001, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 6,212,662, which is entitled, “Method and Devices for the Transmission of Data With the Transmission Error Checking.” A true and correct copy of the ’662 patent is attached as Exhibit A.

39. KPN is the owner by assignment of the ’662 patent and holds all rights, title and interest to the ’662 patent, including the sole right to sue and recover for any and all infringements.

40. The devices claimed in the '662 patent have proved to be of great importance to the field of error detection and correction.

41. For example, in 2011, Sisvel International, which manages the LTE/LTE-A patent pool, recognized claims 1-3 of the '662 patent to be essential to §§ 5, 5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.3.2, 5.1.3.2.1, and 5.1.3.2.3, including Figure 5.1.3-2, Tables 5.1.3-1 and 5.1.3-3, of the 3GPP TS 36.212 LTE communications standard. Shortly thereafter, the International Patent Evaluation Committee recognized claims 1-4 of the '662 patent to be essential to §§ 1, 4.1, 4.2.2.2, 4.2.3, 4.2.3.2.1, 4.2.3.2.3, 4.2.3.2.3.1, and 4.2.3.2.3.2, including Figure 4 and Tables 1 and 2, of the 3GPP TS 25.212 standard for UMTS (W-CDMA) communications.

42. The '662 patent also has been treated as essential by both Sisvel International, which managed the cdma2000 patent pool, and Sipro Lab Telecom, Inc., which managed a pool of telecommunications patents essential to the W-CDMA 3GPP standard.

43. At least by November 4, 2011, KPN told HTC Corporation that the '662 patent had been recognized as essential to the 3GPP TS 36.212 standard for LTE communications and the 3GPP TS 25.212 standard for UMTS (W-CDMA) communications.

44. Consistent with this recognition of its importance to the field of error detection and correction, the '662 patent has been licensed extensively by many of HTC Corporation's mobile technology competitors.

45. The '662 patent also has been the subject of prior litigation, including in *Koninklijke KPN N.V. v. Samsung Electronics Co., Ltd.*, Civil Action No. 2:14-cv-1165 (E.D. Tex.), in which the Court construed terms expected to be at issue in this matter. Plaintiffs rely on those constructions herein in support of their allegations.

46. Further, in the course of that prior litigation, Samsung Electronics Co., Ltd., et al., (“Samsung”) filed a request for *inter partes* review—arguing claims 1-4 of the ’662 patent were anticipated and/or obvious in light of multiple prior art references. After thorough consideration, the Patent Trial and Appeals Board (“PTAB”) declined to institute *inter partes* review as to claims 3 and 4 of the ’662 patent on any ground—concluding on the lengthy record before it that no “reasonable likelihood” existed that claims 3 and 4 were invalid. Regarding claims 1 and 2, the PTAB concluded that no “reasonable likelihood” existed that the claims were anticipated.

47. Samsung filed a Petition for Rehearing of the PTAB’s decision. The PTAB subsequently issued another lengthy decision denying the request.

48. HTC Corporation directly infringed the ’662 patent in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authorization, products that practice claims 1-4 of the ’662 patent literally or under the doctrine of equivalents (hereafter “’662 Accused Products”). At a minimum, such ’662 Accused Products include all HTC smartphones and other mobile telecommunication devices configured to send or receive data over an LTE, UMTS, or cdma2000 data network making use of or incorporating error checking technology as described in Ex. A. This includes products like the HTC One M9 (hereafter “HTC One M9”), which, on information and belief, HTC configured to transmit data on LTE, UMTS, and cdma2000 data networks.

49. As detailed in paragraphs 50-54 below, on information and belief, the HTC One M9 is an LTE, UMTS, and cdma2000 compatible device that meets every element of claims 1-4

of the '662 patent literally or under the doctrine of equivalents.¹ Further, on information and belief, the identified components and functionality of the HTC One M9 are representative of the components and functionality present in all '662 Accused Products, including but not limited to each product identified in Plaintiffs' First Amended Identification of Accused Products and Form of Damages served on August 17, 2017.

50. Claim 1 of the '662 patent is illustrative of the device claims of the '662 patent. It claims a device configured to check for errors in data, including in transmitted data, from data provided in blocks comprised of plural bits received in a particular ordered sequence. The device further includes at least one varying device configured to vary this original data, including through its incorporation of an interleaver or other permutating device configured to reorder at least some of the bits of the original data input to it without reordering any of the blocks of original data it receives, prior to supplying it to at least one generating device. The device further includes at least one generating device configured to generate supplementary data (check data) from the data it receives from the at least one permutating device.

51. The HTC One M9 is a device configured to send and receive data transmitted in the form of blocks comprised of plural bits in a particular ordered sequence that can be used to generate data for error checking. The HTC One M9 also is a device configured to use such data to check for errors in such transmitted data. Further, on information and belief, the HTC One M9 includes a varying device configured to vary the original data it receives, including through its incorporation of an interleaver configured to reorder the bit position of at least some of the bits of the original data provided to it without reordering any of the blocks of that original data, prior to supplying that now varied data to at least one generating device. Further, on information and

¹ This description of infringement is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each '662 Accused Product infringes the '662 patent.

belief, the HTC One M9 further includes at least one device configured to generate supplementary data for use in error checking (i.e., check data), including through its use of an encoder.

52. Further, on information and belief, the HTC One M9 includes at least one varying device, including, for example, an interleaver, configured to change from time to time the manner in which it reorders at least some of the data bits it receives as disclosed in claim 2 of the '662 patent.

53. The HTC One M9 further includes at least one varying device, including, for example, an interleaver, configured to change the manner in which it reorders at least some of the data bits it receives based on the characteristics of at least some of the data bits it receives as disclosed in claim 3 of the '662 patent.

54. On information and belief, the HTC One M9 further includes at least one permutating device, including, for example, an interleaver, that includes or makes use of data storage in which subsequent reorderings of the members of the given set are stored as disclosed in claim 4 of the '662 patent.

55. On information and belief, HTC Corporation therefore directly infringed each element of claims 1-4 of the '662 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, '662 Accused Products like the HTC One M9, including by directing and authorizing its "controll[ed]" affiliate HTC America Inc. (a wholly owned subsidiary of HTC Corporation) to undertake such acts to sell and offer for sale in the United States, and import into the United States, without authorization '662 Accused Products like the HTC One M9. For example, as HTC Corporation stated in its 2015 Annual Report, it is the controlling company in the HTC hierarchy and directs and uses HTC America

Inc. to distribute its smartphone products in the United States as part of its consolidated and centrally controlled “global Smartphone & Connected Device Business.”

56. On information and belief, at the behest of HTC Corporation and as a direct result of its instigation, control, and direction, acting as its agent HTC America Inc. thus offered for sale and sold in the United States, and imported into the United States, without authorization, ’662 Accused Products like the HTC One M9.

57. In addition, HTC Corporation indirectly infringed the ’662 patent in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by others, including OEMs, agent-subsidaries, affiliates, partners, telecommunication service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the ’662 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of the ’662 patent.

58. For example, HTC Corporation took active steps to encourage HTC America Inc. to directly infringe each element of claims 1-4 of the ’662 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, ’662 Accused Products like the HTC One M9, including by transferring such products to HTC America Inc. and directing and authorizing it to distribute those products in the United States.

59. Further, HTC Corporation took active steps to encourage end users of the HTC One M9 to use the product in the United States in a manner it knew would directly infringe each element of claims 1-4 of the ’662 patent as described above in paragraphs 50-54, including by

encouraging users to utilize the HTC One M9 to transmit data over LTE data networks despite knowing of the '662 patent and the fact that such data transmissions will cause an end user to use the HTC One M9 in a manner that infringes the '662 patent.

60. Such active steps included, for example, advertising and marketing the HTC One M9 as a smartphone capable of transmitting data utilizing an LTE data network and instructing HTC One M9 users how to utilize the HTC One M9 to transmit data on such data networks in the written manuals it provided despite its knowledge of the '662 patent and the fact that such data transmissions cause HTC One M9 users to directly infringe the '662 patent. *See, e.g.*, http://dl4.htc.com/web_materials/Manual/HTC_One_M9/HTC_One_M9_US_User_Guide_M60.pdf?_ga=2.218159001.1419383713.1513800329-1471113286.1513800329 (instructing users at pages 170-171 how to connect to an LTE network and transmit data over such networks) (copyrighted in 2015 by HTC Corporation). In short, HTC Corporation actively induced the direct infringement of the '662 patent by end users by, among other things, publishing HTC One M9 manuals and promotional literature describing and instructing the configuration and operation by its customers of the HTC One M9 in an infringing manner and by offering support and technical assistance to its customers that encourage use of the HTC One M9 in ways that directly infringe claims 1-4 of the '662 patent.

61. Further, HTC Corporation undertook and continued to undertake the above identified active steps after receiving notice of the '662 patent and claim charts showing how such sales, importation, and use infringe the '662 patent.

62. In addition, HTC Corporation has indirectly infringed the '662 patent in violation of 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, the '662 Accused Products with knowledge that they are especially designed or

adapted to operate in a manner that infringes the '662 patent and despite the fact that the infringing technology or aspects of each '662 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

63. For example, prior to undertaking the above identified acts, HTC Corporation knew that the functionality included in the '662 Accused Products that enabled each to perform error checking in accordance with the 3GPP TS 36.212 standard for LTE communications and the 3GPP TS 25.212 standard for UMTS (W-CDMA) communications infringed the '662 patent. Further, on information and belief, HTC Corporation knew that the '662 Accused Products, including the HTC One M9, were designed to ensure that they would be interoperable with standard LTE and UMTS data networks, which KPN had shown HTC Corporation required such products to operate in a manner that would infringe the '662 patent.

64. Further, on information and belief, the infringing aspects of the '662 Accused Products can be used only in a manner that infringes the '662 patent and thus have no substantial non-infringing uses. Again using the HTC One M9 as an example, the product includes the devices described above at paragraphs 50-54 specifically so that it can generate check data in accordance with the invention claimed in the '662 patent in order to be interoperable with standard LTE and UMTS data networks. The infringing aspects of the HTC One M9 otherwise have no meaningful use, let alone any meaningful non-infringing use.

65. In addition, HTC's infringement of the '662 patent was willful. HTC Corporation received notice of the '662 patent, along with detailed claim charts demonstrating how and why '662 Accused Products infringe the '662 patent. Nevertheless, HTC Corporation deliberately continued to infringe the '662 patent in the manners described above, including by, on information and belief, selling and offering to sell in the United States, and importing into the

United States, '662 Accused Products like the HTC One M9, in order to market such products as capable of utilizing LTE, UMTS, and cdma2000 data networks in order to promote the sale of those products. Indeed, in its 2014 and 2015 Annual Reports, HTC Corporation emphasized that its compliance with "3G/4G wireless standards" was "expected to benefit HTC product penetration."

66. HTC's acts of infringement have caused damage to KPN, and KPN is entitled to recover from HTC Corporation the damages it has sustained as a result of HTC's wrongful acts in an amount subject to proof at trial.

COUNT 2
INFRINGEMENT OF U.S. PATENT NO. 9,014,667

67. Plaintiffs repeat and incorporate by reference each preceding paragraph as if fully set forth herein and further state:

68. On April 21, 2015, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 9,014,667 ("the '667 patent") which is entitled, "Telecommunications Network and Method for Time-Based Network Access." A true and correct copy of the '667 patent is attached as Exhibit B.

69. KPN is the owner by assignment of the '667 patent and holds all right, title and interest to the '667 patent, including the sole right to sue and recover for any and all infringements.

70. In September 2015, the International Patent Evaluation Committee found claims 31, 32, and 35 of the '667 patent to be essential to the following standards: 3GPP TS 22.368 §§ 3.1, 3.2, 4, 7.1.1, and Annex A; 3GPP TS 23.003 § 2.1; 3GPP TS 23.060 §§ 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.2, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.3, 5.3.6.4, 5.3.13.2, 5.6.3, 6.5.0, 6.8.2.2, 13.1, 13.2.1, 13.2.3, 13.4, 14.1, and 14.2; and 3GPP TS 24.008 §§ 4.1.1.7, 4.7.3.1.4 and 6.1.3.11.

71. Consistent with the recognition of its importance to the field of machine-to-machine communications, the '667 patent has been licensed extensively by many of HTC's mobile technology competitors.

72. The '667 patent also has been the subject of prior litigation, including in *Koninklijke KPN N.V. v. Samsung Electronics Co., Ltd.*, Civil Action No. 2:14-cv-1165 (E.D. Tex.), in which the Court construed terms expected to be at issue in this matter. Plaintiffs rely on those constructions herein in support of their allegations.

73. HTC Corporation has infringed and continues to infringe the '667 patent in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authorization, products that practice at least claim 35 of the '667 patent literally or under the doctrine of equivalents (hereafter "'667 Accused Products"). At a minimum, such '667 Accused Products include all HTC smartphones and other devices and technology configured to transmit data over an LTE network making use of or incorporating back-off timers and machine-to-machine communications as described in Ex. B. This includes products like the HTC U Ultra, including at least model number U-1u (hereafter "U Ultra"), which, on information and belief, is configured to transmit data on LTE data networks, and which utilizes back-off timers in connection with machine-to-machine communications.

74. For example, as detailed in paragraphs 75-76 below, on information and belief, the HTC U Ultra is an LTE compatible device that meets every element of claim 35 of the '667 patent literally or under the doctrine of equivalents.² Further, on information and belief, the identified components and functionality of the HTC U Ultra are representative of components

² This description of infringement is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each '667 Accused Product infringes the '667 patent.

and functionality present in all '667 Accused Products, including but not limited to each product identified in Plaintiffs' First Amended Identification of Accused Products and Form of Damages served on August 17, 2017.

75. Claim 35 of the '667 patent claims a terminal for use in a telecommunications network, wherein the telecommunications network is configured for providing access to a plurality of terminals, each terminal being associated with a unique identifier for accessing the telecommunications network. The terminal comprises a message receiver configured for receiving a message from the telecommunications network, the message comprising information relating to a deny access time interval, the deny access time interval being a time period during which telecommunications network access for the terminal is denied, wherein the time period is adapted by the telecommunications network depending on a monitored network load. The terminal further comprises one or more processors, and memory storing processor instructions that, when executed by the one or more processors, cause the one or more processors to carry out operations including: an access request operation for transmitting an access request to the telecommunications network in accordance with the deny access time interval, wherein machine-to-machine applications are executed in the telecommunications network, and wherein the terminal for the machine-to-machine applications are denied access to the telecommunications network during peak load time intervals, the time period being within peak load time intervals.

76. As recited in claim 35 of the '667 patent, the HTC U Ultra provides access a telecommunication network that is configured to provide access to multiple terminals/devices. Each U Ultra device is associated with a unique identifier when connected to an LTE network. Each U Ultra has a Globally Unique Temporary UE Identify and Temporary Mobile Subscriber Identity whenever they are associated with an LTE network. The U Ultra device

comprises a message receiver configured for receiving a message from the telecommunications network. For instance, the HTC U Ultra contains at least a cellular modem and/or one or more processors (such as the Qualcomm MSM8996 Snapdragon 821) that receive messages from the telecommunication network that receives the message(s) from the telecommunications network. The HTC U Ultra receives a message comprising information relating to a time slot during which access to the telecommunications network is denied, the time slot during which access to the telecommunications network is denied being a duration of time during which telecommunications network access for the terminal is denied. For instance, the '667 Accused Products, in response to a request such as ATTACH, Location Registration Request, PDN Connectivity Request, Bearer Resource Modification Request, PDP Context Activation Request, PDP Context Modification Request, or the like, may receive a "reject" message from a telecommunication network when the network is congested. Such "reject" message received by the '667 Accused Products includes a back-off timer (T3346 or T3396) value. This back-off timer value indicates the time value during which the telecommunications network may deny further network resource requests from the '667 Accused Products. The duration of time of the back-off timer is adapted by the telecommunications network depending on the monitored network load. The network load of the telecommunication network is monitored. For example, the network load is monitored through the MME congestion control in the telecommunications network. The U Ultra device includes a processor (such as the Qualcomm MSM8996 Snapdragon 821) that executes instructions stored in the memory to interact with the telecommunication network. The processor in the U Ultra device executes instructions to transmit a request to the telecommunications network to access its resources in accordance with the back-off timer's time interval. For example, when the HTC U Ultra sends a Request such as

an ATTACH Request, Location Registration Request, PDN Connectivity Request, Bearer Resource Modification Request, PDP Context Activation Request, PDP Context Modification Request, or the like, to the network and subsequently receives from the network a “Reject” message with a rejection cause value “22” (congestion) or cause “26” (insufficient resources), the HTC U Ultra does not attempt to resend the resource request until the expiration the received back-off timer period. The HTC U Ultra device executes machine-to-machine application in the telecommunication network. For example, the HTC U Ultra may request access for mail or application updates from the telecommunications network. Such machine-to-machine applications can be executed in the telecommunications network. The HTC U Ultra device is denied access by the telecommunications network during peak load time intervals and/or as the telecommunications network does not have sufficient resources. During such peak load time intervals, the HTC U Ultra will receive a “Reject” message response with a back-off timer value. The HTC U Ultra is denied the resource request during the time period within the back-off timer value.

77. On information and belief, HTC Corporation therefore has directly infringed, and continues to directly infringe, each element of claim 35 of the ’667 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, ’667 Accused Products like the HTC U Ultra, including by directing and authorizing its “controll[ed]” affiliate HTC America Inc. (a wholly owned subsidiary of HTC Corporation) to undertake such acts to sell and offer for sale in the United States, and import into the United States, without authorization ’667 Accused Products like the HTC U Ultra. For example, as HTC Corporation stated in its 2015 Annual Report, it is the controlling company in the HTC hierarchy and directs

and uses HTC America Inc. to distribute its smartphone products in the United States as part of its consolidated and centrally controlled “global Smartphone & Connected Device Business.”

78. On information and belief, at the behest of HTC Corporation and as a direct result of its instigation, control, and direction, acting as its agent HTC America Inc. thus offered for sale and sold in the United States, and imported into the United States, without authorization, ’667 Accused Products like the HTC U Ultra.

79. In addition, HTC has indirectly infringed and continues to indirectly infringe the ’667 patent in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by others, including OEMs, agent-subsidiaries, affiliates, partners, telecommunication service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the ’667 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of the ’667 patent.

80. For example, HTC Corporation has taken active steps to encourage HTC America Inc. to directly infringe each element of claim 35 of the ’667 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, ’667 Accused Products like the HTC U Ultra, including by transferring such products to HTC America Inc. and directing and authorizing it to distribute those products in the United States.

81. Further, HTC Corporation took active steps to encourage end users of the HTC U Ultra to use the product in the United States in a manner it knew will directly infringe each element of claim 35 of the ’667 patent as described above in paragraphs 75-76, including by

encouraging users to utilize the HTC U Ultra to make use of machine-to-machine communications over LTE data networks despite knowing of the '667 patent and the fact that such data communications that may be subject to a back-off timer will cause an end user to use the HTC U Ultra in a manner that infringes the '667 patent.

82. Such active steps include, for example, advertising and marketing the HTC U Ultra as a smartphone capable of using machine-to-machine applications on an LTE data network and instructing HTC U Ultra users in the written manuals it has provided, and continues to provide, how to utilize the HTC U Ultra to use such applications on such data networks despite its knowledge of the '667 patent and the fact that the use of such applications to make communications causes HTC U Ultra users to directly infringe the '667 patent. *See, e.g.*, <http://images.comparecellular.com/phones/2551/htc-u-ultra-manual-eng.pdf> (instructing users at page 27 on the use of syncing email, calendars, and social media accounts, and at page 135 on how to use particular apps to obtain weather updates, for example) (copyrighted in 2017 by HTC Corporation). In short, HTC has actively induced and continues to actively induce the direct infringement of the '667 patent by end users by, among other things, publishing HTC U Ultra manuals and promotional literature describing and instructing the configuration and operation by its customers of the HTC U Ultra in an infringing manner and by offering support and technical assistance to its customers that encourage use of the HTC U Ultra in ways that directly infringe claim 35 of the '667 patent.

83. Further, HTC Corporation undertook and continues to undertake the above identified active steps after receiving notice of the '667 patent and how such sales, importation, and use infringe the '667 patent.

84. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the '667 patent in violation of 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, the '667 Accused Products with knowledge that they are especially designed or adapted to operate in a manner that infringes the '667 patent and despite the fact that the infringing technology or aspects of each '667 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

85. For example, prior to undertaking the above identified acts, HTC Corporation knew the functionality included in the '667 Accused Products that enabled each to receive back-off timers and machine-to-machine communications infringes the '667 patent. Further, on information and belief, HTC Corporation knew that the '667 Accused Products, including the HTC U Ultra, were designed to ensure that they would utilize back-off timers to facilitate machine-to-machine communications in the manner KPN had shown HTC Corporation required such products to infringe the '667 patent.

86. Further, on information and belief, the infringing aspects of the '667 Accused Products can be used only in a manner that infringes the '667 patent and have no substantial non-infringing uses. Again using the HTC U Ultra as an example, the product includes the components and functionality described above at paragraphs 75-76 specifically so that it can comply with back-off timers for machine-to-machine communications in accordance with the invention claimed in the '667 patent. The infringing aspects of the HTC U Ultra otherwise have no meaningful use, let alone any meaningful non-infringing use.

87. In addition, HTC Corporation's ongoing infringement of the '667 patent was and is willful. HTC Corporation received notice of the '667 patent. HTC Corporation also received claim charts showing how HTC's LTE and UMTS devices infringed the '667 patent. HTC

Corporation also was told that the '667 patent had been recognized as essential to telecommunications standards governing the use of back-off timers and machine-to-machine communications in LTE communications. Nevertheless, without authorization, HTC Corporation infringed and continues to infringe the '667 patent in the manners described above, including by, on information and belief, selling and offering to sell in the United States, and importing into the United States, '667 Accused Products like the HTC U Ultra, in order to market such products as capable of utilizing LTE data networks in order to promote the sale of those products. Indeed, in its 2014 and 2015 Annual Reports, HTC Corporation emphasized that its compliance with "3G/4G wireless standards" was "expected to benefit HTC product penetration."

88. HTC's acts of infringement have caused damage to KPN, and KPN is entitled to recover from HTC Corporation the damages it has sustained as a result of HTC's wrongful acts in an amount subject to proof at trial.

COUNT 3
INFRINGEMENT OF U.S. PATENT NO. 7,933,564

89. Plaintiffs repeat and incorporate by reference each preceding paragraph as if fully set forth herein and further state:

90. On April 26, 2011, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 7,933,564, which is entitled, "Method for the Multi-Antenna Transmission of a Linearly-Precoded Signal, Corresponding Devices, Signal and Reception Method." A true and correct copy of the '564 patent is attached as Exhibit C.

91. 3G Licensing is the owner by assignment from Orange of the '564 patent and holds the sole right to sue and recover for any and all infringements at issue.

92. The devices claimed in the '564 patent have proved to be of great importance to the field of multi-antenna transmission and reception. For example, claims of the '564 Patent

have been found essential to 3GPP TS 36.211 v8.7.0: Section 6.3. 6.3.2. 6.3.3. 6.3.3.3. 6.3.4, 6.3.4.3-Figure 6.3 -1; Table 6.3.3.3-1 (ISLD-201607-001).

93. Consistent with this recognition of its importance to the field of multiple input and multiple output transmission and reception, the '564 patent has been licensed extensively by many of HTC's mobile technology competitors.

94. HTC Corporation has directly infringed and continues to directly infringe the '564 patent in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authorization, products that practice at least claim 13 and, when used, claim 1 of the '564 patent literally or under the doctrine of equivalents (hereafter "'564 Accused Products"). At a minimum, such '564 Accused Products include all HTC smartphones and other devices and technology that utilize Multiple-Input-Multiple-Output (MIMO) antennas to receive or transmit information over an LTE network as described in Ex. C. This includes products like the HTC 10, which, on information and belief, includes multiple antennas for transmission and reception on an LTE network.

95. For example, as detailed in paragraphs 96-99 below, on information and belief, the HTC 10 is an LTE compatible device that meets every element of at least claim 13 and, when used, claim 1 of the '564 patent literally or under the doctrine of equivalents.³ Further, on information and belief, the identified components and functionality of the HTC 10 are representative of the components and functionality present in all '564 Accused Products, including but not limited to each product identified in Plaintiffs' First Amended Identification of Accused Products and Form of Damages served on August 17, 2017.

³ This description of infringement is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each '564 Accused Product infringes the '564 patent.

96. Claim 1 of the '564 patent is illustrative of the method claims of the '564 patent. It recites a method for sending a signal formed by vectors, each vector comprising N source symbols to be sent, and implementing M transmit antennas where M is greater than or equal to 2, the method comprising linearly precoding said signal, implementing a matrix product of a source matrix, formed by said vectors organized in successive rows, by a linear precoding matrix, delivering a precoded matrix, and sending precoded vectors corresponding to columns of said precoded matrix successively, wherein each precoded vector has M symbols, which have undergone a precoding by a same column of the linear precoding matrix and are distributed over said M antennas.

97. On information and belief, any use of the HTC 10 to connect to an LTE data network causes the HTC 10 to perform the method disclosed by claim 1 of the '564 patent. On information and belief, the HTC 10 includes the Qualcomm MSM8996 Snapdragon 820 processor, which on connecting to an LTE data network interacts with technology in the HTC 10 to implement Multiple-Input-Multiple-Output (MIMO) antennas to send a common reference signal that is formed from several different sources which is mapped into layers to form a signal that is transmitted through two or more antennas through the antenna ports. On information and belief, the HTC 10 precodes the signal, such as by implementing the product of a source matrix formed by vectors organized in successive rows. On information and belief, the HTC 10 sends precoded vectors corresponding to columns of the precoded matrix successively. Each precoded vector has M symbols. On information and belief, the HTC 10 precodes by the same column of the linear precoding matrix that are distributed over M antennas. For example, the HTC 10 uses open loop transmit diversity during uplink (transmit) distributed over 2 or more antenna ports.

98. Claim 13 of the '564 patent is illustrative of the device claims of the '564 patent. It recites a device for receiving a signal sent on M transmit antennas, where M is greater than or equal to 2, said device comprising: P receiver antennas, where P is greater than or equal to 2, means of reception, on said P antennas, of reception vectors, and means of distribution by columns of said reception vectors in a reception matrix, wherein each reception vector comprises P received symbols distributed on said P receiver antennas and corresponding symbols having undergone a precoding by a same column of a linear precoding matrix at sending, and means of processing of said reception matrix, comprising means of multiplying by a linear de-precoding matrix representing the linear precoding matrix used at sending, so as to obtain a de-precoded matrix by which it is possible to extract an estimation of source symbols sent.

99. On information and belief, as claimed by claim 13 of the '564 patent, the HTC 10 is a device that receives signals sent over an LTE communications network on at least two transmit antennas. On information and belief, the HTC 10 includes at least two receiver antennas and a Qualcomm MSM8996 Snapdragon 820 processor. On information and belief, the processor in the HTC 10, combined with other hardware and software in the HTC 10, distributes by columns the reception vectors in a reception matrix. On information and belief, the reception vector comprises two received symbols distributed on the at least two receiver antennas in the HTC 10. On information and belief, the corresponding symbols having undergone a precoding by the same column of a linear precoding matrix when the vector was sent over the LTE communications network. On information and belief, the processor in the HTC 10, combined with other hardware and software in the HTC 10, processes the reception matrix, comprising means of multiplying by a linear de-precoding matrix representing the linear precoding matrix

used at sending, so as to obtain a de-precoded matrix by which it is possible to extract an estimation of the source symbols sent on the LTE communications network.

100. On information and belief, HTC Corporation therefore has directly infringed, and continues to directly infringe, each element of at least claim 1 of the '564 patent through the actions of its agents, including HTC America Inc., and employees, including by testing and demonstrating its operation and otherwise using without authorization in the United States,, '564 Accused Products like the HTC 10.

101. On information and belief, HTC Corporation therefore has directly infringed, and continues to directly infringe, each element of at least claim 13 of the '564 patent by selling, and offering to sell in the United States, and by importing into the United States, without authorization, '564 Accused Products like the HTC 10, including by directing and authorizing its “controll[ed]” affiliate HTC America Inc. (a wholly owned subsidiary of HTC Corporation) to undertake such acts to sell and offer for sale in the United States, and import into the United States, without authorization '564 Accused Products like the HTC 10. For example, as HTC Corporation stated in its 2015 Annual Report, it is the controlling company in the HTC hierarchy and directs and uses HTC America Inc. to distribute its smartphone products in the United States as part of its consolidated and centrally controlled “global Smartphone & Connected Device Business.”

102. On information and belief, at the behest of HTC Corporation and as a direct result of its instigation, control, and direction, acting as its agent HTC America Inc. thus offered for sale and sold in the United States, and imported into the United States, without authorization, '564 Accused Products like the HTC 10.

103. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the '564 patent in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by others, including OEMs, agent-subsidiaries, affiliates, partners, telecommunication service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the '564 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of the '564 patent.

104. For example, HTC Corporation has taken active steps to encourage HTC America Inc. to directly infringe each element of claim 13 of the '564 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, '564 Accused Products like the HTC 10, including by transferring such products to HTC America Inc. and directing and authorizing it to distribute those products in the United States.

105. Further, HTC Corporation took active steps to encourage end users of the HTC 10 to use the product in the United States in a manner it knows will directly infringe each element of at least claims 1 and 13 of the '564 patent as described above in paragraphs 96-99, including by encouraging users to utilize the HTC 10 to transmit data over LTE data networks despite knowing of the '564 patent and the fact that such data transmissions will cause an end user to use the HTC 10 in a manner that infringes the '564 patent.

106. Such active steps include, for example, advertising and marketing the HTC 10 as a smartphone capable of transmitting data on an LTE data network and instructing HTC 10 users in the written manuals it has provided, and continues to provide, how to utilize the HTC 10 to

transmit data on such data networks despite its knowledge of the '564 patent and the fact that such data transmissions cause HTC 10 users to directly infringe the '564 patent. *See, e.g.*, https://support.sprint.com/global/pdf/user_guides/htc/htc10/htc10_ug.pdf (instructing users at pages 132-135 how to connect to an LTE network and transmit data over such networks) (stating portions of document are copyrighted by HTC Corporation). In short, HTC Corporation has actively induced and continues to actively induce the direct infringement of the '564 patent by end users by, among other things, publishing HTC 10 manuals and promotional literature describing and instructing the configuration and operation by its customers of the HTC 10 in an infringing manner and by offering support and technical assistance to its customers that encourage use of the HTC 10 in ways that directly infringe at least claims 1 and 13 of the '564 patent.

107. Further, HTC Corporation undertook and continues to undertake the above identified active steps after receiving notice of the '564 patent and how such sales, importation, and use infringe the '564 patent.

108. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the '564 patent in violation of 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, the '564 Accused Products with knowledge that they are especially designed or adapted to operate in a manner that infringes the '564 patent and despite the fact that the infringing technology or aspects of each '564 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

109. For example, HTC Corporation knew the functionality included in the '564 Accused Products that enabled each to perform MIMO transmission and reception in accordance with the '564 patent. Further, on information and belief, HTC Corporation knew that the '564

Accused Products, including the HTC 10, were designed to ensure that they would infringe the '564 patent.

110. Further, on information and belief, the infringing aspects of the '564 Accused Products can be used only in a manner that infringes the '564 patent and thus have no substantial non-infringing uses. Again using the HTC 10 as an example, the product includes the components and functionality described above at paragraphs 96-99 specifically so that it can send and receive transmissions using multiple antennas in accordance with the invention claimed in the '564 patent. The infringing aspects of the HTC 10 otherwise have no meaningful use, let alone any meaningful non-infringing use.

111. In addition, HTC Corporation's ongoing infringement of the '564 patent was and is willful. HTC Corporation received notice of the '564 patent, and information regarding why the '564 Accused Products infringe the '564 patent, including that the '564 patent had been recognized as essential to various standards governing the use of multiple antennas to transmit or receive data in an LTE network. Nevertheless, without authorization, HTC Corporation infringed and continues to infringe the '564 patent in the manners described above, including by, on information and belief, selling and offering to sell in the United States, and importing into the United States, '564 Accused Products like the HTC 10, in order to market such products as capable of utilizing LTE data networks in order to promote the sale of those products. Indeed, in its 2014 and 2015 Annual Reports, HTC Corporation emphasized that its compliance with "3G/4G wireless standards" was "expected to benefit HTC product penetration."

112. HTC's acts of infringement have caused damage to 3G Licensing, and 3G Licensing is entitled to recover from HTC Corporation the damages it has sustained as a result of HTC's wrongful acts in an amount subject to proof at trial.

COUNT 4
INFRINGEMENT OF U.S. PATENT NO. 7,995,091

113. Plaintiffs repeat and incorporate by reference each preceding paragraph as if fully set forth herein and further state:

114. On August 9, 2011, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 7,995,091, which is entitled, “Mixed Media Telecommunication Call Manager.” A true and correct copy of the ’091 patent is attached as Exhibit D.

115. 3G Licensing is the owner by assignment from Orange of the ’091 patent and holds the sole right to sue and recover for any and all infringements at issue.

116. The inventions claimed in the ’091 patent have proved to be of great importance to the field of mixed media telecommunications, including the discontinuation of video calls. For example, claims of the ’091 patent have been declared essential to 3GPP TS 23.228 V8.12.0 Section 4.0, 4.16.1, 4.16.2, 5.4.4. Annex E, E.0, E.2.1a.1, E.2.1a.2, E.2.4.0, E.2.4.1, Figure E 3GPP TS 23.401 V8.17.0 Section 4.7.1, 4.7.2.2, and Figure 4.7.2.2-1. (ISLD-201308-0029 ISLD-201308-0030 ISLD-201308-0031).

117. HTC Corporation has directly infringed and continues to directly infringe the ’091 patent in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authorization, products that practice at least claim 1 and, when used, claim 8 of the ’091 patent literally or under the doctrine of equivalents (hereafter “’091 Accused Products”). At a minimum, such ’091 Accused Products include all HTC smartphones and other devices and technology configured to conduct and discontinue video calls in compliance with the LTE standard, as described in Ex. A. This includes products like the HTC 10, which, on information and belief, is configured to perform video calls in compliance with the LTE standards.

118. For example, as detailed in paragraphs 119-122 below, on information and belief, the HTC 10 is an LTE compatible device that meets every element of at least at least claim 1 and, when used, claim 8 of the '091 patent literally or under the doctrine of equivalents.⁴ Further, on information and belief, the identified components and functionality of the HTC 10 are representative of the components and functionality present in all '091 Accused Products, including but not limited to each product identified in Plaintiffs' First Amended Identification of Accused Products and Form of Damages served on August 17, 2017.

119. Claim 1 of the '091 patent is illustrative of the device claims of the '091 patent. It recites a videophone responsive to the discontinuation of an in progress mixed media telecommunications call, the videophone comprising: a radio frequency (RF) interface configured to communicate via a radio telecommunications network; a transmitter configured to transmit data carrying at least a first and second media to a remote videophone during a first call; and a processor in communication with the RF interface configured to receive an indication, via the RF interface, that the transmission of data to the remote videophone in the first call is being discontinued, the processor further being configured to, in response to the indication, initiate a second call to the remote videophone, the second call not supporting the second media.

120. On information and belief, the HTC 10 is a mobile phone that functions as a videophone and that interfaces with a radio frequency telecommunications network. On information and belief, the HTC 10 is configured to transmit data carrying at least a first media, such as audio, and a second media, such as video, to a remote videophone during a first video call conversation. On information and belief, the HTC 10 includes a processor, such as the Qualcomm MSM8996 Snapdragon 820, that is in communication with the HTC 10's RF

⁴ This description of infringement is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each '091 Accused Product infringes the '091 patent.

interface. On information and belief, the processor in the HTC 10 receives an indication from the RF interface that the transmission of data to the remote videophone in the first call is being discontinued. As a non-limiting example, the HTC 10 receives a CS Service Notification from the network's Mobility Management Entity (MME), which indicates to the HTC 10 that the current data transmission to the remote video is to be discontinued because the HTC 10 is required to switch to another network connection, and which is followed in response by a second call to the remote videophone, such as by performing a circuit switch fallback or transition to the 3G communication network from the LTE network. On information and belief the processor in the HTC 10 is further configured to, in response to the indication, initiate a second call to the remote videophone. On information and belief, the second call (i.e. the circuit switched voice call) does not support video or graphics.

121. Claim 8 of the '091 patent is illustrative of the method claims of the '091 patent. It recites a method of responding to the discontinuation of an in progress mixed media telecommunications call by a videophone having a radio frequency interface to a radio frequency telecommunications network, the method comprising: transmitting, via the radio frequency telecommunications network, data carrying at least a first and second media to a remote videophone during a first call; receiving, via the radio frequency interface, an indication that the transmission of data to the remote videophone in the first call is being discontinued; and initiating a second call to the remote videophone, in response to the indication, the second call not supporting the second media.

122. On information and belief, use of the HTC 10 to conduct a video call performs a method of responding to the discontinuation of an in-progress mixed media telecommunications call, at least by way of video calling applications on the HTC 10, which interface with a radio

frequency telecommunications network. On information and belief, the HTC 10 transmits data using a radio frequency to the telecommunication network of the cellular service provider. On information and belief, the HTC 10 carries at least a first media, such as audio, and a second media, such as video, during a first video call conversation. As a non-limiting example, the HTC 10 uses the voice over internet protocol (VOIP) for communication of audio and video data with another smartphone during a video call. On information and belief, the HTC 10 receives via the radio frequency interface an indication that the transmission of data to the remote videophone of the first call is being discontinued. As a non-limiting example, the HTC 10 receives a CS Service Notification from the network's Mobility Management Entity (MME), which indicates to the HTC 10 that the current data transmission to the remote video is to be discontinued because the HTC 10 is required to switch to another network connection, and which is followed in response by a second call to the remote videophone, such as by performing a circuit switch fallback or transition to the 3G communication network from the LTE network. On information and belief, the second call (i.e. the circuit switched voice call) does not support video or graphics.

123. On information and belief, HTC Corporation therefore has directly infringed, and continues to directly infringe, each element of at least claim 1 of the '091 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, '091 Accused Products like the HTC 10, including by directing and authorizing its "controll[ed]" affiliate HTC America Inc. (a wholly owned subsidiary of HTC Corporation) to undertake such acts to sell and offer for sale in the United States, and import into the United States, without authorization '091 Accused Products like the HTC 10. For example, as HTC Corporation stated in its 2015 Annual Report, it is the controlling company in the HTC hierarchy and directs and uses HTC America Inc. to distribute its smartphone products in the United States

as part of its consolidated and centrally controlled “global Smartphone & Connected Device Business.”

124. On information and belief, HTC Corporation therefore has directly infringed, and continues to directly infringe, each element of at least claim 8 of the '091 patent through the actions of its agents, including HTC America Inc., and employees, including by testing and demonstrating its operation and otherwise using without authorization in the United States,, '091 Accused Products like the HTC 10.

125. On information and belief, at the behest of HTC Corporation and as a direct result of its instigation, control, and direction, acting as its agent HTC America Inc. thus offered for sale and sold in the United States, and imported into the United States, , without authorization, '091 Accused Products like the HTC 10.

126. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the '091 patent in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by others, including OEMs, agent-subsidaries, affiliates, partners, telecommunication service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the '091 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of the '091 patent.

127. For example, HTC Corporation has taken active steps to encourage HTC America Inc. to directly infringe each element of claim 1 of the '091 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, '091

Accused Products like the HTC 10, including by transferring such products to HTC America Inc. and directing and authorizing it to distribute those products in the United States.

128. Further, HTC Corporation took active steps to encourage end users of the HTC 10 to use the product in the United States in a manner it knows will directly infringe each element of at least claim 1 and, when used, claim 8 of the '091 patent as described above in paragraphs 119-122, including by encouraging users to utilize the HTC 10 to conduct video call communications over LTE data networks despite knowing of the '091 patent and the fact that such communications will cause an end user to use the HTC 10 in a manner that infringes the '091 patent.

129. Such active steps include, for example, advertising and marketing the HTC 10 as a smartphone capable of conducting and discontinuing video calls on an LTE data network and instructing HTC 10 users in the written manuals it has provided, and continues to provide, how to utilize the HTC 10 to conduct and discontinue video calls on such data networks despite its knowledge of the '091 patent and the fact that such video calls cause HTC 10 users to directly infringe the '091 patent. *See, e.g.,* https://support.sprint.com/global/pdf/user_guides/htc/htc10/htc10_ug.pdf (instructing users at page 138 how to make a video call on an LTE network) (stating portions of document are copyrighted by HTC Corporation). In short, HTC Corporation has actively induced, and continues to actively induce the direct infringement of the '091 patent by end users by, among other things, publishing HTC 10 manuals and promotional literature describing and instructing the configuration and operation by its customers of the HTC 10 in an infringing manner and by offering support and technical assistance to its customers that encourage use of the HTC 10 in ways that directly infringe at least claims 1 and 8 of the '091 patent.

130. Further, HTC Corporation undertook and continues to undertake the above identified active steps after receiving notice of the '091 patent and how such sales, importation, and use infringe the '091 patent.

131. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the '091 patent in violation of 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, the '091 Accused Products with knowledge that they are especially designed or adapted to operate in a manner that infringes the '091 patent and despite the fact that the infringing technology or aspects of each '091 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

132. For example, HTC Corporation knew that the functionality included in the '091 Accused Products that enabled each to conduct and discontinue video calls in accordance with the '091 patent. Further, on information and belief, HTC Corporation knew that the '091 Accused Products, including the HTC 10, were designed to ensure that they would infringe the '091 patent.

133. Further, on information and belief, the infringing aspects of the '091 Accused Products can be used only in a manner that infringes the '091 patent and thus have no substantial non-infringing uses. Again using the HTC 10 as an example, the product includes the components and functionality described above at paragraphs 119-122 specifically so that it can conduct and discontinue video calls in accordance with the invention claimed in the '091 patent. The infringing aspects of the HTC 10 otherwise have no meaningful use, let alone any meaningful non-infringing use.

134. In addition, HTC Corporation's ongoing infringement of the '091 patent was and is willful. HTC Corporation received notice of the '091 patent, as well as information as to why

the '091 Accused Products infringe the '091 patent, including that the '091 patent had been recognized as essential to conducting and discontinuing video calls in an LTE network. Nevertheless, without authorization, HTC Corporation continued to infringe the '091 patent in the manners described above, including by, on information and belief, selling and offering to sell in the United States, and importing into the United States, '091 Accused Products like the HTC 10, in order to market such products as capable of conducting and discontinuing video calls on LTE data networks in order to promote the sale of those products. Indeed, in its 2014 and 2015 Annual Reports, HTC Corporation emphasized that its compliance with "3G/4G wireless standards" was "expected to benefit HTC product penetration."

135. HTC's acts of infringement have caused damage to 3G Licensing, and 3G Licensing is entitled to recover from HTC Corporation the damages it has sustained as a result of HTC's wrongful acts in an amount subject to proof at trial.

COUNT 5
INFRINGEMENT OF U.S. PATENT NO. 6,856,818

136. Plaintiffs repeat and incorporate by reference each preceding paragraph as if fully set forth herein and further state:

137. On February 15, 2005, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 6,856,818, which is entitled, "Data store for mobile radio station." A true and correct copy of the '818 patent is attached as Exhibit E.

138. 3G Licensing is the owner by assignment from Orange of the '818 patent and holds the sole right to sue and recover for any and all infringements at issue.

139. The devices claimed in the '818 patent have proved to be of great importance to the telecommunications field by allowing selective access to data stored on a subscriber identity module. For example, claims of the '818 Patent have been found essential to 3GPP TS 21.111

V7.1.0 , Section 1, 4, 5.1, 5.2, 6.1 and 11.2 Document 3GPP TS 31.102 V7.13.0 , Section 4.4.2, 4.7, 5.1.1.1 and 5.3.29 ; Figure 4.2 3GPP TS 31.101 V7.0.1 , Section 8.1 ETSI TS 102.221 V7.4.0 , Section 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2 ; Figure 8.2, 8.4 and K.1 ; Table 8.1 and 11.11 (ISLD-201011-001, ISLD-201011-002, ISLD-201011-003, ISLD-201011-004).

140. HTC Corporation has directly infringed and continues to directly infringe the '818 patent in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authorization, products that practice at least claim 18 of the '818 patent literally or under the doctrine of equivalents (hereafter "'818 Accused Products"). At a minimum, such '818 Accused Products include all HTC smartphones and other devices and technology configured to select from multiple subscriber profiles, including but not limited to being compatible with a Universal Subscriber Identity Module (USIM) or a Universal Integrated Circuit Card (UICC), in accordance with the LTE, UMTS, or cdma2000 standards as described in Ex. E. This includes products like the HTC 10, which, on information and belief, is configured to be compatible with USIM and/or UICC cards.

141. For example, as detailed in paragraphs 142-143 below, on information and belief, the HTC 10 comprises a modified subscriber data storage module that meets every element of claim 18 of the '818 patent literally or under the doctrine of equivalents.⁵ Further, on information and belief, the identified components and functionality of the HTC 10 are representative of the components and functionality present in all '818 Accused Products, including but not limited to

⁵ This description of infringement is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each '818 Accused Product infringes the '818 patent.

each product identified in Plaintiffs' First Amended Identification of Accused Products and Form of Damages served on August 17, 2017.

142. Claim 18 of the '818 patent is illustrative of the device claims of the '818 patent. It recites a mobile station for use in a mobile communications system, the mobile station complying with a predetermined standard and being adapted, in accordance with the standard, to transmit a first memory access message, identifying a specific data record, in order to access the specific data record on a standard subscriber data storage module complying with the predetermined standard, the mobile station comprising: a modified subscriber data storage module which includes a processor for performing operations and memory having data records for storing data, the modified module being responsive to the first memory access message, identifying the specific data record, wherein the memory holds a plurality of data records corresponding to the specific data record and the processor is arranged to select one data record, from the plurality of data records, to access in response to the first memory access message, the selection being performed on the basis of data identifying a current operational condition of the mobile station and independently of the content of the first memory access message, the identifying data being held in a further data record in the memory means.

143. On information and belief, the HTC 10 is a mobile station for use in a mobile communications system. On information and belief, the HTC 10 complies with predetermined standards, including the LTE, UMTS, and cdma2000 standards (including but not limited to v.3.16.0 of ETSI TS 11.11). On information and belief, the HTC 10 accesses a memory record and transmits the memory access message by identifying a specific data record access. On information and belief, the HTC 10 accesses data from the Universal Subscriber Identity Module (USIM and/or UICC). On information and belief, the HTC 10 contains a modified subscriber

data storage module, such as a USIM and/or UICC card, which includes a processor for performing operations and memory having data records for storing data. On information and belief, the HTC 10 includes a modified module responsive to the first memory access message, such as a USIM and/or UICC card, identifying the specific data record read the record from the UICC. On information and belief, the HTC 10 has memory, such as on a USIM and/or UICC card, to hold a plurality of data records corresponding to the specific data records. On information and belief, the HTC 10 has a processor, such as a USIM and/or UICC card, arranged to select one data record, from the plurality of data records, to access in response to the first memory access message. On information and belief, the HTC 10 performs selection on the basis of data identifying a current operational condition of the mobile station independent of the content of the first memory access message, at least because the identifying data is held in the data records of the UICC. For example, the HTC 10 selects the Application Data File (ADF) at the initialization phase and stored in the UICC and whereby the previously selected USIM and/or UICC application is automatically selected by default operating conditions. Moreover, the HTC 10 also is capable of complying with standards such as ETSI TS 11.11.

144. On information and belief, HTC Corporation therefore has directly infringed, and continues to directly infringe, each element of at least claim 18 of the '818 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, '818 Accused Products like the HTC 10, including by directing and authorizing its "controll[ed]" affiliate HTC America Inc. (a wholly owned subsidiary of HTC Corporation) to undertake such acts to sell and offer for sale in the United States, and import into the United States, without authorization '091 Accused Products like the HTC 10. For example, as HTC Corporation stated in its 2015 Annual Report, it is the controlling company in the HTC hierarchy

and directs and uses HTC America Inc. to distribute its smartphone products in the United States as part of its consolidated and centrally controlled “global Smartphone & Connected Device Business.”

145. On information and belief, at the behest of HTC Corporation and as a direct result of its instigation, control, and direction, acting as its agent HTC America Inc. thus offered for sale and sold in the United States, and imported into the United States, , without authorization, ’818 Accused Products like the HTC 10.

146. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the ’818 patent in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by others, including OEMs, agent-subsidaries, affiliates, partners, telecommunication service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the ’818 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of the ’818 patent.

147. For example, HTC Corporation has taken active steps to encourage HTC America Inc. to directly infringe each element of claim 18 of the ’818 patent by selling and offering to sell in the United States, and by importing into the United States, without authorization, ’818 Accused Products like the HTC 10, including by transferring such products to HTC America Inc. and directing and authorizing it to distribute those products in the United States.

148. Further, HTC Corporation took active steps to encourage end users of the HTC 10 to use the product in the United States in a manner it knows will directly infringe each element of

at least claim 18 of the '818 patent as described above in paragraphs 142-143, including by encouraging users to operate the HTC 10 in conjunction with a USIM or UICC card in order to access a specific data record from the USIM or UICC in compliance with the standard LTE, UMTS, and/or cdma2000 data networks despite knowing of the '818 patent and the fact that such usage of USIM and/or UICC cards will cause an end user to use the HTC 10 in a manner that infringes the '818 patent.

149. Such active steps include, for example, advertising and marketing the HTC 10 as a smartphone configured to select from multiple subscriber profiles, including but not limited to being compatible with a Universal Subscriber Identity Module card and instructing HTC 10 users in the written manuals it has provided, and continues to provide, how to correctly use USIM and/or UICC cards with the HTC 10 despite its knowledge of the '818 patent and the fact that such data transmissions cause HTC 10 users to directly infringe the '818 patent. *See, e.g.*, https://support.sprint.com/global/pdf/user_guides/htc/htc10/htc10_ug.pdf (instructing users at pages 8-10 how to insert a SIM card into the device) (stating portions of document are copyrighted by HTC Corporation). In short, HTC Corporation has actively induced, and continues to actively induce the direct infringement of the '818 patent by end users by, among other things, publishing HTC 10 manuals and promotional literature describing and instructing the configuration and operation by its customers of the HTC 10 in an infringing manner and by offering support and technical assistance to its customers that encourage use of the HTC 10 in ways that directly infringe at least claim 18 of the '818 patent.

150. Further, HTC Corporation undertook and continues to undertake the above identified active steps after receiving notice of the '818 patent and how such sales, importation, and use infringe the '818 patent.

151. In addition, HTC Corporation has indirectly infringed and continues to indirectly infringe the '818 patent in violation of 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, the '818 Accused Products with knowledge that they are especially designed or adapted to operate in a manner that infringes the '818 patent and despite the fact that the infringing technology or aspects of each '818 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

152. For example, HTC Corporation knew the functionality included in the '818 Accused Products that enables each to be configured to select from multiple subscriber profiles, including but not limited to being compatible with a Universal Subscriber Identity Module card, infringes the '818 patent. Further, on information and belief, HTC Corporation knew that the '818 Accused Products, including the HTC 10, were designed to be configured to select from multiple subscriber profiles. In particular, they were designed with specific hardware and software to enable the devices to read multiple subscriber information stored on a Universal Subscriber Identity Module card in a manner that would infringe the '818 patent.

153. Further, on information and belief, the infringing aspects of the '818 Accused Products can be used only in a manner that infringes the '818 patent and thus have no substantial non-infringing uses. Again using the HTC 10 as an example, the product includes the components and functionality described above at paragraphs 142-143 specifically so that it can select from multiple subscriber profiles, including so that it can be compatible with a Universal Subscriber Identity Module card, in accordance with the invention claimed in the '818 patent in order to be interoperable with LTE, UMTS, and/or cdma2000 data networks. The infringing aspects of the HTC 10 otherwise have no meaningful use, let alone any meaningful non-infringing use.

154. In addition, HTC's ongoing infringement of the '818 patent was and is willful. HTC Corporation received notice of the '818 patent, as well as information regarding why '818 Accused Products infringe the '818 patent, including that they had been recognized by others as essential to the use of selecting multiple subscriber identities on devices in an LTE network. Nevertheless, without authorization, HTC Corporation infringed and continues to infringe the '818 patent in the manners described above, including by, on information and belief, selling and offering to sell in the United States, and importing into the United States, '818 Accused Products like the HTC 10, in order to market such products as capable of utilizing USIM and/or UICC cards in order to promote the sale of those products.

155. HTC's acts of infringement have caused damage to 3G Licensing, and 3G Licensing is entitled to recover from HTC Corporation the damages it has sustained as a result of HTC's wrongful acts in an amount subject to proof at trial.

DEMAND FOR JURY TRIAL

156. Plaintiffs hereby demand a jury trial for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for judgment as follows:

A. Declaring that HTC Corporation has infringed the Asserted Patents, contributed to the infringement of the Asserted Patents, and/or induced the infringement of the Asserted Patents;

B. Awarding damages to Plaintiffs arising out of this infringement of the Asserted Patents, including enhanced damages pursuant to 35 U.S.C. § 284 and prejudgment and post-judgment interest, in an amount according to proof;

C. Awarding attorneys' fees to Plaintiffs pursuant to 35 U.S.C. § 285 or as otherwise

permitted by law;

D. Awarding such other costs and further relief as the Court may deem just and proper.

Dated: December 27, 2017

Respectfully submitted,

FARNAN LLP

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